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EXAMINER	
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ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/064,001	DAN ET AL.	
	Examiner	Art Unit	
	KEITH O. ROBINSON	1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 August 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's appeal brief, filed February 19, 2008, has been received and entered in full; however, prosecution for this case has been re-opened after consultation with Applicant's representative, Robert Hanson and thus, the finality of the rejection of the last Office action, mailed September 18, 2007, has been withdrawn.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-16 are under examination.

Response to Arguments

Applicant's arguments, see page 3, last paragraph to page 6, lines 1-2 of the 'Appeal Brief' filed February 19, 2008, regarding the 35 USC 102 (b) rejection of claim 1 as being anticipated by Fry et al (US Patent No. 5,631,152, May 20, 1997) on pages 2-3 of the Office Action mailed September 18, 2007, have been fully considered and found persuasive. The rejection has been withdrawn.

Applicant's arguments, see page 6, 1st paragraph to page 11, lines 1-2 of the 'Appeal Brief' filed February 19, 2008, regarding the 35 USC 103 rejection as being unpatentable over Zhou et al (Plant Cell Rep. 15: 159-163, 1995), in view of Tegeder et al (Plant Cell Rep. 15: 164-169, 1995), further in view of Weeks et al (Plant Physiol. 102: 1077-1084, 1993), still further in view of Cheng et al (Plant Physiol. 115: 971-980, 1997) on pages 3-4 of the Office Action mailed September 18, 2007, have been fully considered and found persuasive. The rejection has been withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen et al (U.S. Patent No. 5,736,369, April 7, 1998), in view of Zhong et al (Planta 187: 483-489, 1992), in view of Weeks et al (Plant Physiol 102: 1077-1084, 1993), in view of Poehlman et al (Molecular biology: Application in plant breeding, Chapter 8. *In* Breeding Field Crops, 4th ed., 1995, pages 132-155), in view of Cheng et al (Plant Physiol 115: 971-980, 1997).

The claims read on a method of producing multiple transgenic wheat plants from a single explant comprising (a) providing an explant presenting a plurality of meristems; (b) culturing said explant in a first multiple bud inducing media suitable for inducing

production of a plurality of buds from at least one of said meristems; (c) introducing exogenous DNA into more than one of said plurality of buds; (d) removing said plurality of buds from said first media and transferring said plurality of buds to a second media suitable for induction of elongation of said buds into shoots; (e) harvesting and transferring said shoots to a culture medium that promotes root development; and (f) culturing said transferred shoots to produce multiple transgenic wheat plants.

Regarding claim 1, Bowen et al teach a method of producing transgenic cereal plants from a single explant. See, for example, column 2, lines 24-51 where it teaches a method for producing transgenic cereal plants and provides examples of cereal plants wherein wheat is listed as one such example.

Regarding claims 1, step (b), 2, 3, 4, 5 and 6, Bowen et al teach culturing explants in a multiple bud inducing media. See, for example, column 7, lines 62-65 where it states, "a shoot multiplication medium will utilize a cytokinin, such as Kinetin, BAP, Thidiazuron or Zeation, at a concentration between 0.5 and 10 mg/l…[and] [a] low level of auxin also may be required in some genotypes". The specification teaches that a multiple shoot inducing media comprises "a basal plant tissue culture media supplemented with a cytokinin and an auxin" (see page 6, paragraph 003).

Regarding claim 1, step (c), Bowen et al teach introducing exogenous DNA into a plurarity of meristems. See, for example, column 2, lines 45-46 where it states, "foreign DNA can be introduced into a plurality of meristems, at least some of which differentiate...to form a plurality of plantlets.

Regarding claims 11 and 15, Bowen et al teach introducing exogenous DNA into cereal plants via biolistic particle bombardment. See, for example, column 19, lines 41-46.

Bowen et al teach that maize and wheat are monocotyledonous plants (see, for example, column 1, lines 30-32); thus, one of ordinary skill in the art would appreciate that methods used in tissue culture techniques for maize would most likely be used for wheat.

Regarding claim 13, Bowen et al teach a method of producing transgenic cereal plants from a single explant. See, for example, column 2, lines 24-51 where it teaches a method for producing transgenic cereal plants and provides examples of cereal plants wherein wheat is listed as one such example.

Bowen et al teach culturing explants in a multiple bud inducing media. See, for example, column 7, lines 62-65 where it states, "a shoot multiplication medium will utilize a cytokinin, such as Kinetin, BAP, Thidiazuron or Zeation, at a concentration between 0.5 and 10 mg/l...[and] [a] low level of auxin also may be required in some genotypes". The specification teaches that a multiple shoot inducing media comprises "a basal plant tissue culture media supplemented with a cytokinin and an auxin" (see page 6, paragraph 003).

Bowen et al teach introducing exogenous DNA into a plurarity of meristems. See, for example, column 2, lines 45-46 where it states, "foreign DNA can be introduced into a plurality of meristems, at least some of which differentiate...to form a plurality of plantlets.

Bowen et al teach that maize and wheat are monocotyledonous plants (see, for example, column 1, lines 30-32); thus, one of ordinary skill in the art would appreciate that methods used in tissue culture techniques for maize would most likely be used for wheat.

Bowen et al do not teach steps (a), (d), (e) and (f) of claim 1.

Bowen et al do not teach scutellar node (claim 7).

Bowen et al do not teach wheat mesocotyl explant (claim 8).

Bowen et al do not teach exogenous DNA comprising a nucleic acid encoding a protein conferring resistance to a selection agent (claims 9 and 10)

Bowen et al do not teach exogenous DNA introduced via *Agrobacterium*-mediated transformation (claims 12 and 14).

Bowen et al do not teach providing a wheat mesocotyl explant presenting a plurality of meristems.

Bowen et al do not teach removing said plurality of buds from said first media and transferring said plurality of buds to a second media suitable for induction of elongation of said buds into shoots.

Bowen et al do not teach culturing said shoots to produce multiple wheat plants.

Zhong teach claim 1, step (a) providing an explant presenting a plurality of meristems. See, for example, page 483, 2nd column, 2nd paragraph to page 484, 1st column, lines 1-11 where it teaches surface-sterilization of seeds and aseptic

germination of seeds on MS medium in Petri dishes in darkness at 24 degrees Celsius; excising a portion of young leaf and stem immediately below the leaf primordial and culturing said portion on MS basal medium; shoot tips cultured on medium and multiple shoot clumps arising from explants.

In addition, Zhong et al also teach culturing said explant in a first multiple bud inducing media suitable for inducing production of a plurality of buds from at least one of said meristems. See, for example, page 484, 2nd column, 1st paragraph of 'Results' of the Zhong et al reference where it teaches a basal medium, MS, containing BA (a cytokinin, as evidenced on page 7, paragraph 0034 of the specification) and 2,4-D (an auxin, as evidenced on page 7, paragraph 0034 of the specification). Also, see, for example, page 484, Figure 1 where it depicts culturing explants in a multiple bud inducing media. Zhong et al also teach "[o]ur work shows that the corn-shoot meristem can be committed to form either clumps of multiple shoots or somatic embryos in vitro by manipulating the concentrations of BA [cytokinin] and 2,4-D [auxin] in the culture medium" (see page 488, 1st column, last paragraph).

Zhong et al teach claim 1, step (d) removing said plurality of buds from said first media and transferring said plurality of buds to a second media suitable for induction of elongation of said buds into shoots. See, for example, page 484, 1st column, 2nd and 3rd paragraphs where it teaches inducing adventitious shoot formation by transferring shoot-tip explants to MS basal medium.

Zhong et al teach claim 1, step (f) culturing transferred shoots to produce multiple transgenic wheat plants. See, for example, page 484, Figure 1 where it teaches rooted corn plants produced after shoot development.

Regarding claim 7, Zhong et al teach plurality of meristems containing the scutellar node. See, for example, page 483, 2nd column, last paragraph where it teaches "[t]he position of the shoot tip of the seedling inside the coleoptile could be determined by the localized enlargement of the seedling at the junction of mesocotyl and coleoptile". The specification teaches, "mesocotyl refers to the internode between and including the scutellar node, and the coleoptile" (see page 5, paragraph 0029). The specification also teaches "[m]eristem tissue is a tissue that produces cells that undergo differentiation to form mature tissues" (page 5, paragraph 0029). It would be obvious to one of ordinary skill in the art that meristematic tissue is inherent in the explants taught by Zhong et al.

Regarding claim 8, Zhong et al teach maize mesocotyl explant (see, for example, page 483, 2nd column, 2nd paragraph). It would be obvious to one of ordinary skill in the art that wheat mesocotyl explant can be used in the method taught by Zhong et al based on the above teachings of Bowen et al that maize and wheat are both monocotyledonous plants.

In addition, Zhong et al also teach culturing said explant in a first multiple bud inducing media suitable for inducing production of a plurality of buds from at least one of said meristems. See, for example, page 484, 2nd column, 1st paragraph of 'Results' of the Zhong et al reference where it teaches a basal medium, MS, containing BA (a cytokinin, as evidenced on page 7, paragraph 0034 of the specification) and 2,4-D (an

auxin, as evidenced on page 7, paragraph 0034 of the specification). Also, see, for example, page 484, Figure 1 where it depicts culturing explants in a multiple bud inducing media. Zhong et al also teach "[o]ur work shows that the corn-shoot meristem can be committed to form either clumps of multiple shoots or somatic embryos in vitro by manipulating the concentrations of BA [cytokinin] and 2,4-D [auxin] in the culture medium" (see page 488, 1st column, last paragraph).

Zhong et al teach providing an explant presenting a plurality of meristems. See, for example, page 483, 2nd column, 2nd paragraph to page 484, 1st column, lines 1-11 where it teaches surface-sterilization of seeds and aseptic germination of seeds on MS medium in Petri dishes in darkness at 24 degrees Celsius; excising a portion of young leaf and stem immediately below the leaf primordial and culturing said portion on MS basal medium; shoot tips cultured on medium and multiple shoot clumps arising from explants.

Zhong et al teach removing said plurality of buds from said first media and transferring said plurality of buds to a second media suitable for induction of elongation of said buds into shoots. See, for example, page 484, 1st column, 2nd and 3rd paragraphs where it teaches inducing adventitious shoot formation by transferring shoot-tip explants to MS basal medium.

Zhong et al teach culturing shoots to produce multiple transgenic plants. See, for example, page 484, Figure 1 where it teaches rooted corn plants produced after shoot development.

Poehlam et al teach claim 1, step (e) harvesting and transferring said shoots to a culture medium that promotes root development. See, for example, page 135, 1st paragraph where it teaches, "[a]fter adventitious shoots are formed, the culture is transferred to a rooting medium to induce root initiation and subsequently plantlets".

Regarding the range of concentrations as recited in claim 6, Poehlman et al teach "[t]he ratio of auxin to cytokinin has an important role in the initiation of shoot and root primordia...a low auxin:cytokinin ratio stimulates initiation of shoot buds" (see page 134, last paragraph). Thus, one of ordinary skill in the art would understand that concentrations of cytokinins and auxins can be adjusted depending on the components of the media.

Regarding claims 9, 10 and 16, Weeks et al teach exogenous DNA comprising a nucleic acid encoding a protein conferring resistance to a selection agent, selecting for plants containing the protein and introduction of said DNA via biolistic particle bombardment. See, for example, page 1078, 1st column, last paragraph where it teaches exogenous DNA, namely the *bar* gene that encodes the enzyme PAT which inactivates phosphinothricin, the active ingredient of the herbicides bialophos and Basta. See, for example, page 1079, 1st column, 3rd paragraph where it teaches a selection method based on spraying transformed wheat plants with herbicide to determine which wheat plants were resistant. See, for example, page 1078, 2nd column, 2nd paragraph where it teaches introduction of DNA via biolistic particle bombardment.

Regarding claims 12 and 14, Cheng et al teach introduction of exogenous DNA into wheat via *Agrobacterium*-mediated transformation. See, for example, page 971, last paragraph to page 972, 2nd column, 2nd paragraph.

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of Applicant's invention to combine the teachings of Bowen et al, Zhong et al, Weeks et al, Poehlman et al and Cheng et al to produce a method of producing multiple transgenic wheat plants from a single explant.

One of ordinary skill in the art would have been motivated to combine these teachings because Bowen et al teach "foreign DNA can be introduced into a plurality of meristems...to form a plurality of plantlets" (see column 2, lines 45-47) and Poehlman et teach that "[e]xplants may originate from a wide range of plant tissues, including…meristem" (see page 134, 2nd paragraph). Thus, one of ordinary skill in the art would be motivated to produce transgenic plants from an explant.

In addition, one of ordinary skill in the art would have reasonable expectation of success based on the success of Zhong et al in producing "[a]bout 20-50 shoots…per shoot-tip explant within four weeks of culture" (see page 486, 1st column, last line to 2nd column, 1st line). Though Zhong et al teach multiple corn plants produced from a single explant, one of ordinary skill in the art would expect that multiple wheat plants would also be produced from a single explant because Bowen et al teach that maize and wheat are monocotyledonous plants (see, for example, column 1, lines 30-32); thus, one of ordinary skill in the art would appreciate that methods used for maize would most likely be used for wheat.

Claim Rejections - 35 USC § 103

Claims 1-16 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Fry et al (US Patent No. 5,631,152, May 20, 1997), in view of Eudes et al (US Patent No. 6,995,016, which is a continuation-in-part of application 09/641,243, filed August 17, 2000). The rejection is repeated for the reasons of record as set forth in the Office Action mailed September 18, 2007 (see pages 4-5). Applicant's arguments, filed February 19, 2008, have been fully considered but are not persuasive.

Applicant argues that Eudes et al do not suggest how the present result might be achieved, that Eudes et al teach away from the presently claimed subject matter and that the present results are unexpected in view of Eudes et al even when combined with Fry (see page 11, 1st paragraph of the 'Appeal Brief' filed February 19, 2008).

This is not persuasive. Eudes teaches "[o]ther variants of basal MS medium are also known" and teaches one such medium that contains 2,4-D and BAP (see column 5, lines 12-14). The specification teaches that 2,4-D is an auxin and BAP is a cytokinin (see page 7, paragraph 0034) and that a multiple shoot inducing media comprises a basal plant tissue culture media supplemented with a cytokinin and an auxin (see page 6, paragraph 0033); thus, Eudes et al do not teach away from the presently claimed subject matter because Eudes et al teach a medium that contains both a cytokinin and an auxin. One of ordinary skill in the art would understand that Eudes et al can be combined with Fry et al to teach the claimed method because Fry et al teaches, "any

culture medium...can be used" with the invention taught by Fry et al and thus, Fry et al teach how the present result might be achieved.

Applicant's assertion of unexpected results is not persuasive. MPEP 2144.09 (VII) states, "a claimed compound may be obvious because it was suggested by, or structurally similar to, a prior art compound even though a particular benefit of the claimed compound asserted by patentee is not expressly disclosed in the prior art. It is the differences in fact in their respective properties which are determinative of nonobviousness. If the prior art compound does in fact possess a particular benefit, even though the benefit is not recognized in the prior art, applicant's recognition of the benefit is not in itself sufficient to distinguish the claimed compound from the prior art. In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991)".

In the instant case, the claimed bud inducing media was suggested by and structurally similar to the prior art media. As discussed above, Eudes et al teach a basal media that contains both a cytokinin and an auxin and the specification teaches that a multiple shoot inducing media comprises a basal plant tissue culture media supplemented with a cytokinin and an auxin

Applicant argues that Fry et al do not teach the use of a bud inducing media or of a cytokinin to form multiple buds in wheat explants (see page 11, 2nd paragraph of the 'Appeal Brief' filed February 19, 2008).

This is not persuasive. As stated above, Eudes et al teach a basal media that contains both a cytokinin and an auxin.

Applicant argues that Eudes et al does not recognize that multiple meristems or additional buds may be formed in the presence of a cytokinin (see page 11, 2nd paragraph to page 12, lines 1-6 of the 'Appeal Brief' filed February 19, 2008).

This is not persuasive. Eudes et al teach that the hormone content of the media is of greatest significance and that cytokinins, auxins and polyamines are major plant growth regulators used in tissue culture and that cytokinins are involved in tissue development (see column 4, lines 51-54). In addition, Eudes et al teach that cytokinins are involved in many aspects of cell biology and tissue development, especially cell division (see column 4, lines 61-62). Thus, one of ordinary skill in the art would recognize the cytokinins would be used in creating multiple meristems or additional buds because Eudes et al teach that cytokinins are useful in cell division.

Applicant argues that Eudes et al teach away from the present invention and that a skilled worker would conclude, after reading Eudes et al, that the presently claimed approach would not be expected to yield efficient methods for producing transgenic wheat plants (see page 12, 2nd paragraph of the 'Appeal Brief' filed February 19, 2008).

This is not persuasive. One of ordinary skill in the art would use the teachings of Fry et al as discussed on pages 8-10 of the Office Action mailed February 12, 2007 in combination with the teachings of Eudes et al to yield efficient methods for producing transgenic wheat plants. Fry et al teach the culturing of calli on a modified MS medium (see column 3, lines 45-50); Fry et al teach the introduction of exogenous DNA into embryogenic callus (see column 3, lines 64-65); Fry et al teach removing the transformed embryogenic callus from the first media to a second media suitable for

induction of the regenerable tissue into shoots (see column 4, lines 23-39); Fry et al teach culturing the transformed shoots to produce multiple transgenic wheat plants (see column 4, lines 44-55); Fry et al teach the use of auxin (see column 3, lines 45-50) and Fry et al teach harvesting and transferring said shoots to a culture medium that promotes root development (see column 5, lines 21-22).

Fry et al do not teach using cytokinins in a bud inducing media; however, Eudes et al teach a medium that contains both a cytokinin and an auxin as discussed above.

Applicant argues that Fry et al do not teach or suggest use of mesocotyl tissue and the addition of Eudes et al does not cure this defect (see page 12, 3rd paragraph of the 'Appeal Brief' filed February 19, 2008).

This is not persuasive. The specification teaches, "[t]he mesocotyl explant…comprises an apical meristem and axillary meristem, including the scutellar node meristem and portions of the primordial sheathing leaves" (see page 5, paragraph 0030). Fry et al teach "[a]ny regenerable plant tissue can be used…[examples of] such tissues can include calli and/or embryoids from anthers…microspores…inflorescences…and leaf tissues" (see column 3, lines 15-25). One of ordinary skill in the art would understand that mesocotyl tissue can be used in the claimed methods taught by Fry et al and Eudes et al.

Double Patenting

Claim 1 remains rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 7 of U.S. Patent No. 5,631,152. The rejection is repeated for the reasons of record as set forth in the Office Action mailed September 18, 2007 (see pages 5-6). Applicant's arguments, filed February 19, 2008, have been fully considered but are not persuasive.

Applicant argues the rejection is without support because the Office Action fails to set forth a case of obviousness of the instant claims over Fry et al in combination with any of the other references of record in the case (see page 13, 1st paragraph of the 'Appeal Brief' filed February 19, 2008).

This is not persuasive. As stated in the previous Office Action mailed September 18, 2007, although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of said patent read on a method for producing transformed wheat comprising culturing of plant tissue, introducing exogenous DNA, and culturing shoots to produce plants wherein the steps are similar to those of the instant application.

Conclusion

No claims are allowed.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEITH O. ROBINSON whose telephone number is (571)272-2918. The examiner can normally be reached Monday – Friday, 7:30 a.m. - 4:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached at (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Keith O. Robinson, Ph.D.
Examiner
Art Unit 1638

May 8, 2008

/Anne Marie Grunberg/
Supervisory Patent Examiner, Art Unit 1638